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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,606	07/19/2000	MOTOHIKO SAKAMAKI	106794	1441

25944 7590 06/04/2003

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EXAMINER

DUONG, THOI V

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/619,606	SAKAMAKI ET AL.	
	Examiner	Art Unit	
	Thoi V Duong	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Amendment, Paper No. 9, filed March 03, 2003.

Accordingly, claims 1, 3, 5 and 15 were amended, new claims 16-19 was added.

Currently, claims 1-19 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847).

As shown in Figs. 11 and 12, Kaprelian discloses a method for manufacturing an image displaying medium comprising:

providing plural colorant particles 34 on a first flat substrate 62 at first and then a second flat substrate 64 spaced and parallel to the first substrate, wherein no liquid is provided between the first substrate and the second substrate (col. 4, lines 54-67).

Kaprelian further discloses that the intermediate image appearing on surface 66 of the substrate 64 is next removed and used for printing as shown in Figs. 13 and 14. The plural colorant particles are transferred to an intermediate transfer material 66, and then transferred from the intermediate transfer material to the first substrate 72 (similar to 62) through the second substrate 74 (similar to 64) to be provided thereon.

Although it is not shown, it is obvious a spacer member is to be provided on one of the substrates to maintain a distance between the two substrates.

4. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847) in view of DePalma et al. (USPN 5,558,977).

Kaprelian discloses a method for manufacturing an image displaying medium that is basically the same as that recited in claims 5 and 18 except for using a mask having a desired pattern for colorant particles. DePalma discloses that an imagewise pattern may also be formed with colorant particles in a solid imaging element by establishing a density differential between image and non-image areas. DePalma also discloses that, in an image process known as "laser toner fusion", after a toner layer formed of toner particles is made on a substrate, a non-imaged toner is removed (col. 9, lines 35-64). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method for manufacturing an image displaying medium of Kaprelian with the teaching of DePalma et al. by employing a mask on one of the substrates so as to obtain a coloring agent particle layer with a desired pattern.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847) in view of Ota et al. (USPN 3,870,517).

Kaprelian discloses a method for manufacturing an image displaying medium that is basically the same as that recited in claims 6 and 7 except for forming the spacer member having a mesh-like configuration. As shown in Figs. 5 and 6, Ota et al. discloses an insulation sheet 41 with a lot of holes 42 which can be used to divide the suspension layer 22 into a plurality of separate units so as to produce a uniform display for the image display medium (col. 40-55). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method for manufacturing an image displaying medium of Kaprelian with the teaching of Ota et al. by forming the spacer member having a mesh-like configuration to produce a uniform display for the image display medium.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847) in view of DePalma et al. (USPN 5,558,977) as applied to claims 5 and 18 above and further in view of Ota et al. (USPN 3,870,517).

The method for manufacturing an image displaying medium of Kaprelian as modified in view of DePalma et al. as applied to claims 5 and 18 above includes all that is recited in claim 8 except for forming the spacer member having a mesh-like configuration. As shown in Figs. 5 and 6, Ota et al. discloses an insulation sheet 41 with a lot of holes 42 which can be used to divide the suspension layer 22 into a plurality of separate units so as to produce a uniform display for the image display medium (col. 40-55). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method for manufacturing an image displaying medium of Kaprelian with the teaching of Ota et al. by forming the spacer member having a mesh-like configuration to produce a uniform display for the image display medium.

7. Claims 9, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847) in view of Albert (USPN 6,392,786 B1).

Kaprelian discloses a method for manufacturing an image displaying medium that is basically the same as that recited in claims 9, 10, 12, and 13 except for the material of the spacers. As shown in Figs 1, 2, and 3, Albert discloses an image displaying medium comprising a spacer member 118 (or 218 or 318) formed of any material capable of providing the necessary stress relief, for example a flexible polymer such as polyethylene (col. 3, lines 50-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method for manufacturing an image displaying medium of Kaprelian with the teaching of Albert by having the space member formed of a resin or an

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elastic material so as to provide a necessary stress relief when the pressure is applied to the medium.

8. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaprelian (USPN 2,940,847) in view of DePalma et al. as applied to claims 5 and 18 above and further in view of Albert (USPN 6,392,786 B1).

The method for manufacturing an image displaying medium of Kaprelian as modified in view of DePalma et al. as applied to claims 5 and 18 above includes all that is recited in claims 11 and 14 except for the material of the spacers. As shown in Figs 1, 2, and 3, Albert discloses an image displaying medium comprising a spacer member 118 (or 218 or 318) formed of any material capable of providing the necessary stress relief, for example a flexible polymer such as polyethylene (col. 3, lines 50-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method for manufacturing an image displaying medium of Kaprelian with the teaching of Albert by having the space member formed of a resin or an elastic material so as to provide a necessary stress relief when the pressure is applied to the medium.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171.

The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong

05/24/2003


ROBERT H. KIM
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 2800